

LTL-165 datasheet

Origin	Primary human ovarian cancer	Histopathology	Undifferentiated carcinoma
Year of establishment	2004	Doubling time	23 days (sub-renal)
Local invasion	Yes	Metastasis	No
Drug sensitivity	carboplatin 80 mg/kg + paclitaxol 24mg/kg (T/C = 14.64%, response)		

The LTL-165 was developed from a patient's primary ovarian cancer (high-grade (grade 3/3) undifferentiated and serous carcinoma). Histopathologically, it closely resembles the patient's tumor (Figs 1, 2). When grafted under the renal capsules of SCID mice, the LTL-165 shows local invasion into adjacent host kidney parenchyma. No metastasis was observed.

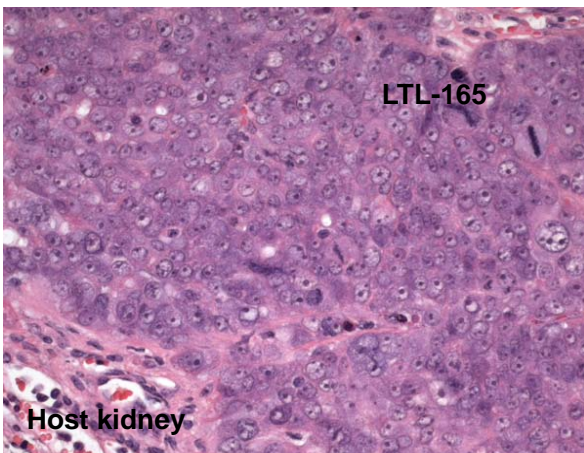


Fig. 1. H&E stained LTL-165 tissue sections.

Showing an undifferentiated carcinoma composed of solid nests of tumor cells with histopathological characteristics similar to those of the original patient's cancer (Fig. 2).(x400)

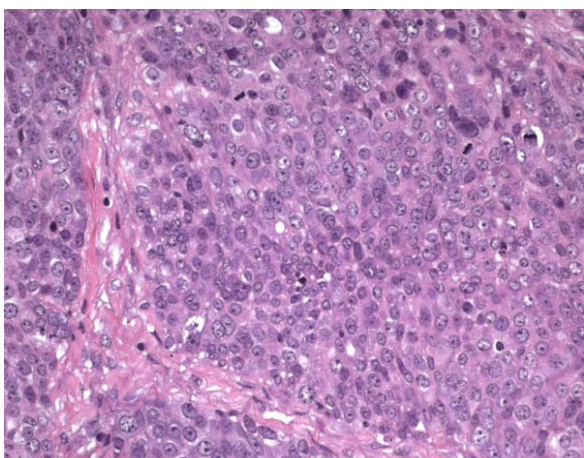


Fig. 2. Patient's cancer tissue before grafting.

Major characteristics:

- Undifferentiated carcinoma;
- Round to oval nuclei with fine chromatin and conspicuous nucleoli;
- Growth in solid nests.(x400)

Genetic and epigenetic characteristics

BRCA1 germline mutation

Tissue microarrays containing LTL-165 tissue are available for screening potential molecular targets.

Applications

1. Pre-clinical evaluation of existing and potential anticancer drugs. Examination of drug efficacy on tumor growth, cell death (apoptosis, necrosis), tissue invasion, and angiogenesis.
2. Discovery of potential therapeutic and/or biomarkers for drug sensitivity targets. BRCA1 mutant cancer may have higher sensitivity to poly (ADP-ribose) polymerase-1 (PARP-1) inhibitor
3. Study of mechanisms underlying tumor growth and progression.

References

1. Lee et al., Gynecologic Oncology 2005; 96: 48-55
2. Press et al., Gynecologic Oncology 2008; 110: 256-264

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